LED Studio 3203D/3203T

PR-3203T

PR-3203D

This product manual contains important information about the safe installation and use of this unit. Please read and follow these instructions carefully and keep this manual in a safe place for future reference.

PR LIGHTING LTD.
http://www.pr-lighting.com

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Please note that as part of our ongoing commitment to continuous product development, specifications are subject to change without notice. Whilst every care is taken in the preparation of this manual we reserve the right to change specifications in the course of product improvement. The publishers cannot be held responsible for the accuracy of the information herein, or any consequence arising from them.
Every unit is tested completely and packed properly by the manufacturer. Please make sure the packing and / or the unit are in good condition before installation and use. Should there be any damage caused by transportation, consult your dealer and do not use the unit. Any damage caused by improper use will not be assumed by the manufacturer and / or dealer.

ACCESSORIES

These items are packed together with the unit:

Name	Quantity	Unit	Remark
Safety cord	2	Pc	With one 1.2m and the other 0.55m in length
XLR signal cable	1	Pc	
Power cord	1	Pc	
User's manual	1	Pc	
Clamp and Mounting Bolt	1	Set	

SAFE USAGE OF THE UNIT

When unpacking and before disposing of the carton, check there is no transportation damage before using the unit. Should there be any damage caused by transportation, consult your dealer and do not use the apparatus.

The unit can be only used indoors, IP20. The fixture should be kept in dry place without excessive dampness, heat, dust and contact with water or other liquids.

The unit is not designed or intended to be mounted directly on to inflammable surfaces.

The unit is only intended for installation, operation and maintenance by qualified personnel.

Do not project the beam onto inflammable surfaces, minimum distance is 2m. 2m

Avoid direct exposure to the light from the lamp. The light is harmful to eyes.

Do not attempt to dismantle and/or modify the unit in any way.

Electrical connection must only be carried out by qualified personnel.

Before installation, ensure that the voltage and frequency of power supply match the power requirements of the unit.

It is essential that each unit is correctly earthed and that electrical installation conforms to all relevant standards.

Do not connect this device to any other types of dimmer apparatus.

Make sure that the power-cord is never crimped or damaged by sharp edges. Never let the power-cord come into contact with other cables. Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.

When the unit is hanged to a high place, please use a safety cord provided to pass through the unit's support as a secondary safety fixing for safety seasons. For details, refer to "INSTALL THE UNIT "section.

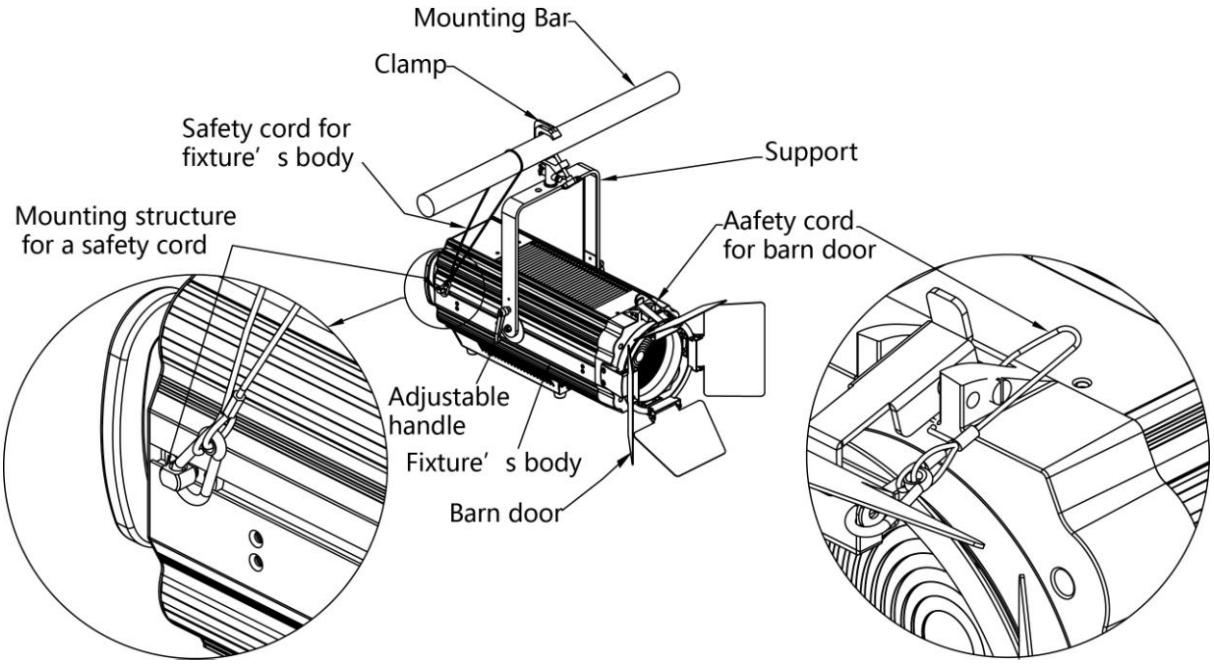
Exterior surface temperatures of the unit after 5 minutes' operation is 45℃, when achieving steady state it is 55℃.

There is no user serviceable parts inside the unit, do not open the housing and never operate the unit with the covers removed.

If any questions, don't hesitate to consult your dealer or manufacturer.

Always disconnection from the power, when the device is not in use or before cleaning or any maintenance work !

INSTALL THE UNIT



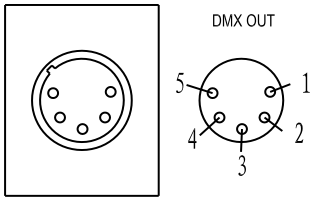
The figures above with a Mounting Bar for the illustrations of the installation is for our clients' reference and it is not a accessory to be supplied up on delivery . This fixture should be hung upon use, but not hung by its side. The whole fixture can be rotated by hand within the range of 180 degrees. While installation, take out two safety cords supplied and hook the clamp to the fixture's support, then hook the clamp to the Mounting Bar and tighten the fasteners of the clamp to mount the whole fixture. Please be sure that the fixture is mounted securely and the mounting place strong enough to support the fixture's weight. For safety, please run a 1.2m safety cord supplied through the Mounting Bar and the Mounting Structure of the fixture, and a second 0.55m safety cord though the barn door module as the figures above for the supplement to ensure safety.

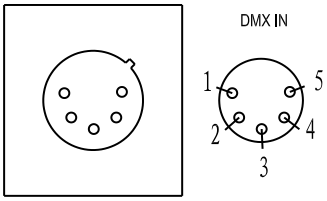
Warning:

1. **The unit MUST be lifted or carried via supporting frame instead of clamps.**
2. **For safety the long safety cord should afford 10 times the unit's weight and the short one 10 times barn door module's weight.**

CONTROL CONNECTION

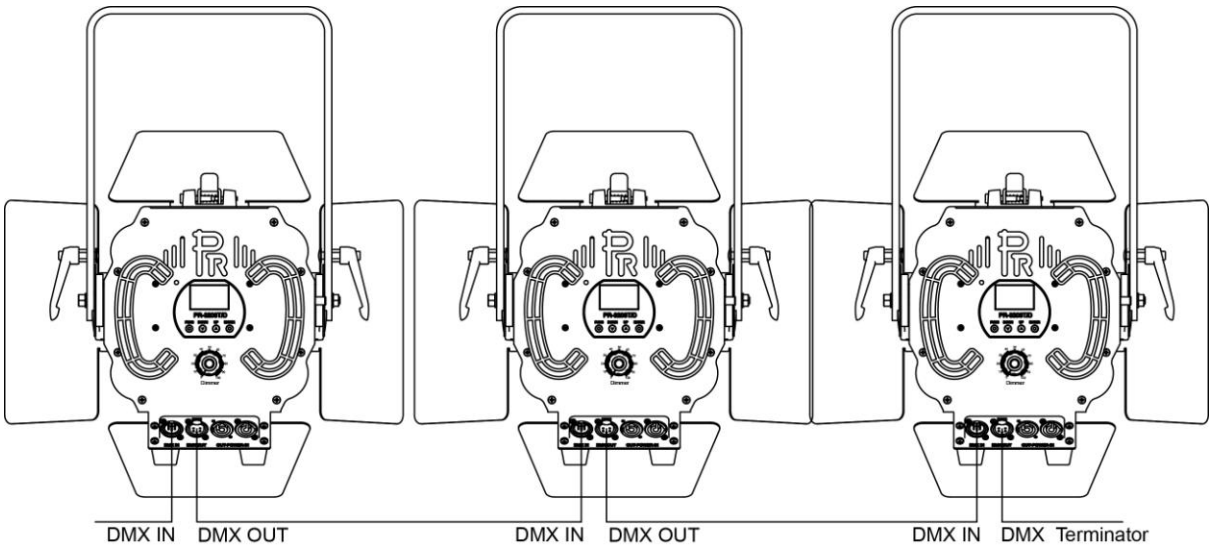
5-PIN





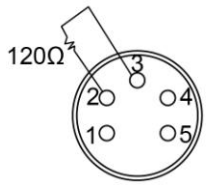
DMX 512	
PIN	FUNCTION
1	GND
2	DATA-
3	DATA+
4	N/C
5	N/C

Connection between the controller and a unit and between one unit and another must be made with a 2 core-screened cable, with each core having at least a 0.5mm diameter. Please use the unit's cannon 5- pin signal input and output cables as connection. The 5-pin signal connections are connected as shown in the figure above.
Note: Care should be taken to ensure that none of the pins touch the metallic body of the plug or each other. The body of the plug is not connected in any way. The unit accepts digital control signals in protocol DMX512 (1990).
The maximum of units in parallel for operation is 16 pcs. Connect the controller's output to the first fixture's input, and connect the first fixture's output to the second fixture's input and connect the rest fixtures in the same way. Eventually connect the last fixture's output to a DMX terminator as shown in the figure below. Note: for synchronous control, the start addresses of all slaves should be same.
Each unit should be connected to power supply individually and the voltage and frequency of the power supply should match those indicated on nameplate.

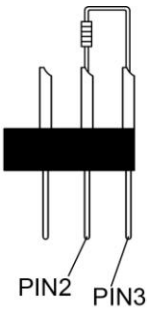


DMX TERMINATOR

In the Controller mode, at the last fixture in the chain, the DMX output has to be connected with a DMX terminator. This prevents electrical noise from disturbing and corrupting the DMX control signals.
The DMX terminator is simply an XLR connector with a 120Ω (ohm) resistor connected across pins 2 and 3, which is then plugged into the output socket on the last unit in the chain. The connections are illustrated below.



DMX TERMINATOR CONNECTION
Connect a 120 (OHM) resistor across pins 2 and 3 in an XLR plug and insert into the DMX out socket on the last unit in the chain.



Operations Menu

1st level menu	2nd level menu	3rd level menu	Remarks
DMX Address	001 - 512		Setup of DMX Address
Config Setup	LED Dimmer Test		Reference Only, not saved
	Focus Position		Linearly focusing
	Lcd Light Setup	On	ON
		Off	Display shuts off 3 minutes after buttons are not pressed after the exit of menus
	Language Setup	English	Language selection
		Chinese	
	Display Inversion	On	Display Inversion
		Off	
Information	LED Temperature	XXXX	
	Fixture use Time	V.X.X	Fixture usage time
	Software Version	V.X.X	

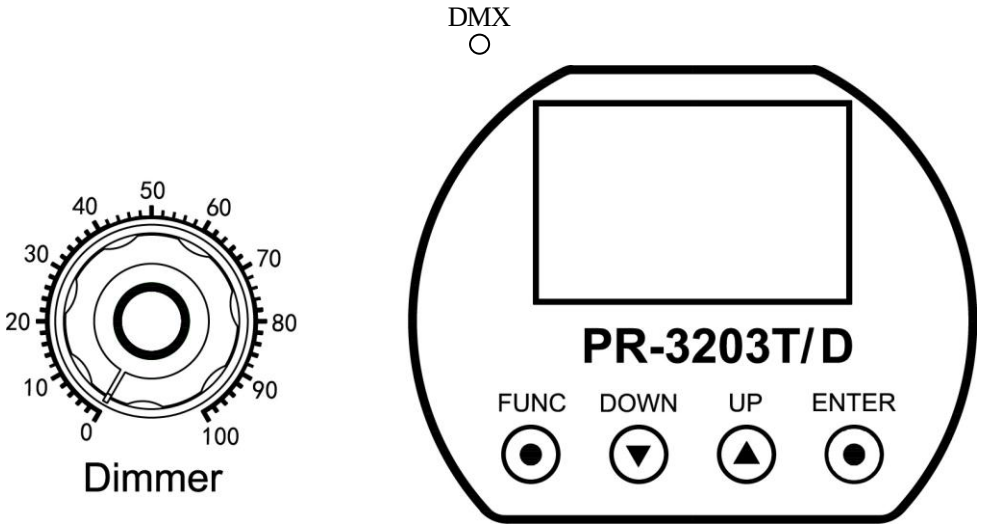
DMX PROTOCOL

CHANNEL	FUNCTION	DMX	DESCRIPTION
1	Dimmer	000-255	From dark to bright
2	Strobe	000 - 007	NO strobe
		008 - 255	Strobe speed from slow to fast
3	Focusing	000-255	From small angle to big angle

INDICATION OF LED DIGITAL TUBE

ADD Indication	ON	DMX signal
	OFF	NO DMX signal

SETUP OPTIONS-UNIT CONFIGURATION



Explanations for Control Panel and Potentiometer

After power-on, LCD display displays the company's LOGO "PR". After reset, the display is at initial display status showing information about company's name including LOGO "PR", fixture's model and DMX address(if the start address is 001, it displays as "address=001") and at the same time the display is locked.

To browse through or change a fixture's configuration, after ENTER button has been pressed for about 3 seconds, the display of AddR means the entrance of the menu. To set or browse through a fixture's settings, press buttons of UP and DOWN. After button ENTER is pressed, a sub-menu is entered showing current parameters while parameters flashing. Press button UP or DOWN to change values(plus or minus)

Press button ENTER to save your settings or enter into the upper level menu and the parameters stops from flashing.
Press FUNC to enter into the upper level menu(parameters not saved)or browse through the upper level menu.
After FUNC is pressed for more than 1second or buttons not pressed for more than 1 minute, it will go back to LCD display initial stage.
After the exit of the menus, the fixture's brightness can be adjusted by potentiometer.(Only after the exit of the menus and no DMX signal can this work)
If there is DMX signal, the DMX signal indication will be on, and at the same time LCD display displays DMX address accordingly, otherwise, the indication will be off..
After the startup of the fixture, reset begins, but the lamp will be on after the reset is completed, at this stage, the brightness of the fixture is as what the potentiometer points to. If the brightness needs to be changed, please follow the above-mentioned instructions. After reset, the focal length will be the one set during last use..

Operation Guide

1. Setup of Start Address

Each unit must be given a DMX start address so that the correct unit responds to the correct control signals. This DMX start address is the channel number from which the unit starts to "listen" to the digital control information being sent out from the controller. The unit has 3 DMX channel, so set the No. 1 unit's address 001, No. 2 unit's address 004, No. 3 unit's address 007, and so on.

2. Configuration Setup

While the display is locked(initial stage of the display), press the ENTER for more than 3 seconds to unlock it, then press UP or DOWN to find the menu of Config Setup and press ENTER to enter sub-menus. Press UP or DOWN to find secondary submenus of Dimming, Focusing, LCD display, Language and Display Inversion.Press ENTER if the submenu is

desired, then change the parameters after pressing UP or DOWN. At last press ENTER to save it and go back to the upper level menu.

3. Information

While the display is locked(initial stage of the display), press the ENTER for more than 3 seconds to unlock it, then press UP or DOWN to find the menu of Information and press ENTER to enter sub-menus. Press UP or DOWN to find secondary submenus of LED Temperature, Fixture Time and Software Version. Press ENTER if the information is desired.

4. Manual Dimming

At the initial stage of the display (after the exit of menu) and without DMX signal, 0-100% linear dimming is available by potentiometer Knob.

5. Reset Test

Automatic reset will be done after first Power-on or re-Power on after a Power-off. While reset, the control panel will display big "PR" Logo. After reset, the control panel will display some information about logo, product model, a fixture's DMX address and etc ,and fixture's angle be adjusted to the one before last power-off. During the reset, there may be some strange sounds like "Du Du" for about 20 seconds ,but this is a normal phenomenon.

Dimmer Priority Sequence.

Priority Sequence: Digital Operation Panel> DMX Dimmer> Potentiometer Dimmer

1. Under Menu Mode, Potentiometer Dimmer doesn't work.
2. Under Menu Mode, DMX works normally excluding Dimmer Function.
3. If the menu is under Dimmer Mode, DMX Dimmer & Potentiometer Dimmer don't work.

MAINTENANCE

To prolong the life of the unit, it is very important to do the maintenance work. If the unit is idle for a long time, damp, smoke or particularly dirty surroundings can cause greater accumulation of dirt on its cover and housing. So it should be cleaned to maintain an optimum light output and at the same time to prevent it from being corrupted by acid gas.

Cleaning frequency depends on the environment in which the fixture operates. Soft cloth and typical glass cleaning products should be used for cleaning. It is recommended to clean unit at least once every 20 days.

Do not use any organic solvent, e.g. alcohol, to clean housing of the apparatus.

TROUBLESHOOTING

PROBLEM	ACTION
The unit doesn't switch on	➢ Power connection is not correct. ➢ Power supply is damaged or abnormal. Call a qualified personnel to fix it. ➢ Connection of control board is not correct. Call a qualified personnel to fix it.
The unit can be turned on, but LEDs do not emit light and are out of control.	➢ Connection of LED board is not correct. Call a qualified personnel to fix it.
The lamp comes on but the unit doesn't respond to the controller	➢ Make sure that the unit is correctly configurated. ➢ Replace or repair the DMX cable.
The beam appears dim	➢ The unit is too hot. Take ventilation measures to make it cool.

TECHNICAL DATA

VOLTAGES:

100V-240V　AC，50/60Hz

POWER CONSUMPTION:

280W@220V

LED:

Power consumption	250W
Quantity	1pc
Manufacturers Rated LED Life	50000 Hours

COLOUR TEMPERATURE:

PR-3203T: 3200±250

PR-3203D:5600±250

Luminous Flux

PR-3203D: 14°：7100 lm，48°: 10700 lm

PR-3203T: 14°：5300 lm，48°: 8300 lm

CRI

Ra≥93

DIMMER:

0-100% linearly adjustable

Zooming

Motorized Zooming is available

BEAM ANGLE:

Field angle(1/10 peak) θ　14°-**48**°

CONTROL:

DMX512, 5 pin interfaces

HOUSING:

High-intensity　aluminum alloy, IP20

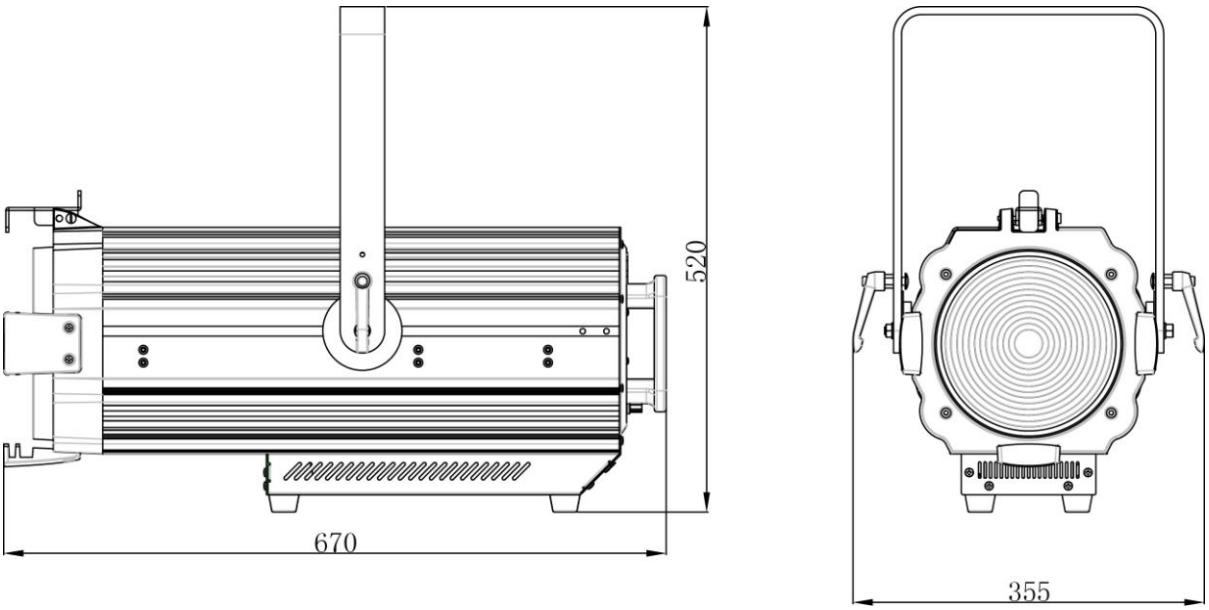
WORK ENVIRONMENT TEMPERATURE:

-20℃~40℃

NET WEIGHT:

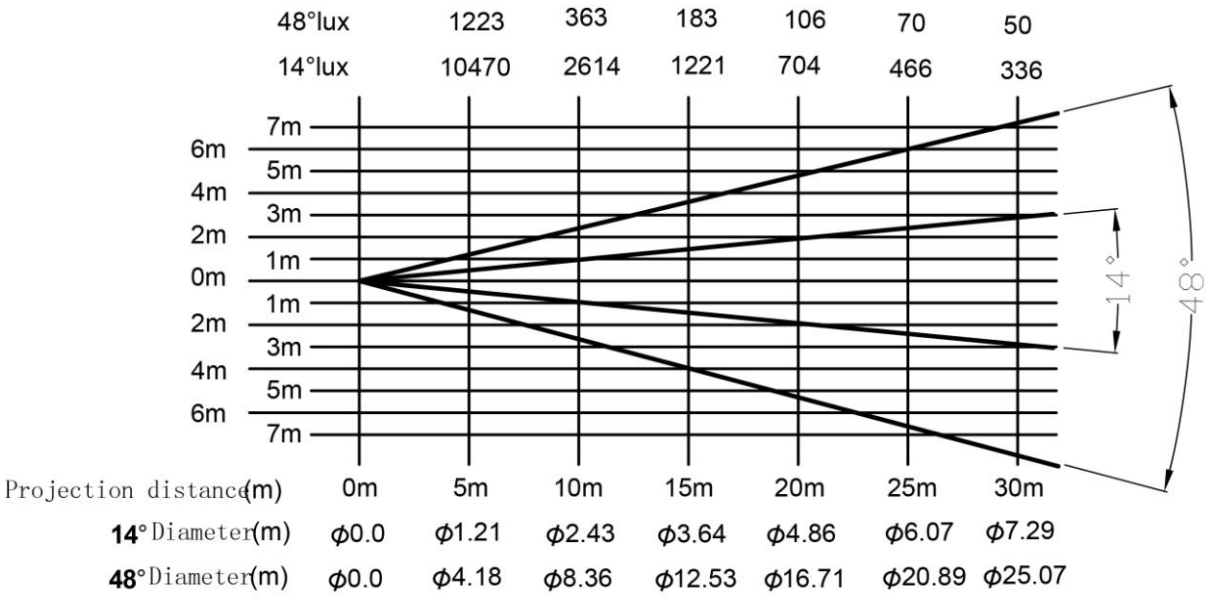
16KG

SIZES: 670x355x520mm



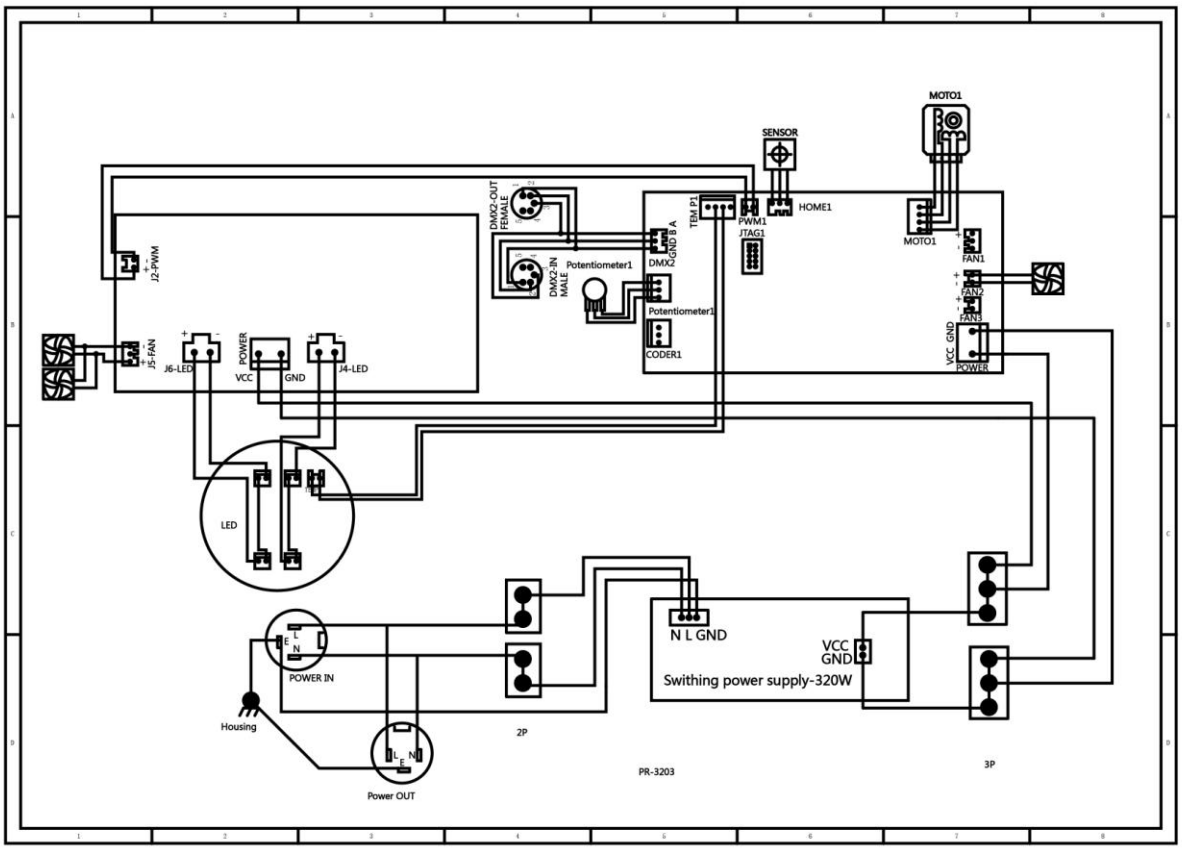
Light Output

Luminous Flux



Projection distance (m)	0m	5m	10m	15m	20m	25m	30m
14° Diameter (m)	ϕ0.0	ϕ1.21	ϕ2.43	ϕ3.64	ϕ4.86	ϕ6.07	ϕ7.29
48° Diameter (m)	ϕ0.0	ϕ4.18	ϕ8.36	ϕ12.53	ϕ16.71	ϕ20.89	ϕ25.07

ELECTRICAL DIAGRAM



COMPONENT ORDER CODES

NAME	PART NO.	QUANTITY	REMARK
SIGNAL CABLE	230090003	1	5m
POWER SWITCH	192010182	1	HLG-320H-48
DRIVER BOARD	230060288	1	
DIGITAL DISPLAY BOARD	230060290	1	
LED LIGHT SOURCES	150020278	1	CT 5600K
LED LIGHT SOURCES	150020277	1	CT 3200K

PR LIGHTING LTD.

PR New Hi-tech Science Park, 1582 Xingye Avenue
Nancun Panyu, Guangzhou, 511442 China
TEL: +86-20-3995 2888
FAX: +86-20-3995 2330

P/N:320020223
Version: 20140804